AMENDMENT TO THE CLAIMS

Claims 1-25 are currently pending in the present application. Claims 18-24 have been withdrawn as being directed to a non-elected invention. Currently, claims 1-17 and 25, drawn to a pharmaceutical agent, stand rejected. Applicant requests that the Examiner enter presently amended claims 1, 5, and 25. Applicant believes that the claims are now in condition for allowance, and notification to that effect is respectfully requested. The following amendments contain no new matter. This listing replaces all prior versions, and listings of claims in the application.

In The Claims:

1. (Currently Amended) A pharmaceutical agent having the formula

Carrier — Linker — Peptide

wherein Peptide is a peptide having the formula aa_n where n is an integer ≤ 40;

wherein Carrier comprises an aryl or alkyl group of sufficient length or steric bulk to inhibit rapid enzymatic degradation of the active peptide species and is a member selected from the group consisting of cinnamoyl, benzoyl, phenylacetyl, 3-OH-cinnamoyl, 3,4-OH-cinnamoyl, 3,4-methylenedioxycinnamoyl, 3-methoxycinnamoyl, 3,4-dimethoxycinnamoyl, 3,4,5-trimethoxy-cinnamoyl, *t*-butoxy-carbonyl, benzyloxycarbonyl, pivaloyl, N-9-fluorenylethoxycarbonyl, fumaroyl, and derivatives thereof; and

wherein Linker is a member selected from the group consisting of C6 to C16 lipidic chains ~~and derivatives thereof~~, 8-amino-3,6-dioxaoctanoic acid, ~~and polymeric derivatives thereof~~, natural peptides, pseudopeptides of less than 4 residues, peptide mimics of less than 4 residues, and derivatives and combinations thereof.

2. (Original) The pharmaceutical agent of claim 1 wherein Linker is a member selected from the group consisting of natural peptides, pseudo peptides of less than 4 residues and peptide mimics of less than 4 residues.

3. (Original) The pharmaceutical agent of claim 1, wherein n is an integer of from 3 to 6.

4. (Original) The pharmaceutical agent of claim 1, wherein n is 5.

5. (Currently Amended) The pharmaceutical agent of claim 1, wherein Peptide comprises the amino acid sequence of ~~is Tyr-Gly-Gly-Phe-Met~~ SEQ ID NO. 1.

6. (Original) The pharmaceutical agent of claim 1 wherein Carrier is a member selected from the group consisting of cinnamoyl, 3-OH-cinnamoyl, 3,4-OH-cinnamoyl, 3-methoxycinnamoyl, 3,4-dimethoxycinnamoyl, and 3,4,5-trimethoxy-cinnamoyl.

7. (Original) The pharmaceutical agent of claim 1 wherein Carrier is cinnamoyl.

8. (Original) The pharmaceutical agent of claim 1 wherein Linker is a -C6 or C8 acidic moiety.

9. (Original) The pharmaceutical agent of claim 1 wherein Linker is $G\psi(CH_2\text{-}CH_2)$ G.

10. (Original) The pharmaceutical agent of claim 1 wherein Peptide is an epitope or an immune sequence characteristic of an infectious, viral or cancerous disease.

11. (Original) A pharmaceutical composition for administration to a patient in need thereof comprising a pharmaceutical agent according to claim 1 and one or more pharmaceutically acceptable adjuvants.

12. (Original) The pharmaceutical composition of claim 11 wherein the composition is formulated for oral administration.

13. (Original) The pharmaceutical composition of claim 11 wherein the composition is formulated for parenteral administration.

14. (Original) The pharmaceutical composition of claim 11 wherein the composition is formulated for intravenous administration.

15. (Original) The pharmaceutical composition of claim 11 wherein the composition releases a biologically active form of the pharmaceutical agent into the patent's system at physiologically effective levels over a period of time of up to twelve hours.

16. (Original) The pharmaceutical composition of claim 11 wherein the composition releases a biologically active form of the pharmaceutical agent into the patient's system at physiologically effective levels over a period of time of up to twenty-four hours.

17. (Original) The pharmaceutical composition according to claim 11 wherein Peptide is an epitope or an immune sequence characteristic of an infectious, viral or cancerous disease.

18. (Withdrawn) A method for treatment of a physiological condition through administration of a peptide species comprising the steps of chemically linking a peptide of the general formula aa_n, where aa is an amino acid, and where n is an integer ≤ 40, to an alkyl or aryl carrier moiety to form a pro-drug, and administering the pro-drug to a patient exhibiting the physiological condition.

19. (Withdrawn) The method of claim 18 wherein the peptide is poorly absorbed orally.

20. (Withdrawn) A method for the treatment of a physiological condition which comprises administering a pharmaceutical agent according to claim 1 to a patient exhibiting the physiological condition.

21. (Withdrawn) The method according to claim 20 wherein the pharmaceutical agent is administered orally or parenterally.

22. (Withdrawn) A method for the treatment of a physiological condition which comprises administering a pharmaceutical agent having the formula Carrier — $Linker_x$ – Peptide wherein X is 0 or 1, Peptide is a peptide having the formula aa_n, wherein n is an integer ≤ 40, Carrier is a member selected from the group consisting of cinnamoyl, benzoyl, phenylacetyl, 3-OH-cinnamoyl, 3,4-methylene-dioxycinnamoyl, 3-methoxycinnamoyl, 3,4-dimethoxycinnamoyl, 3,4,5-trimethoxy-cinnamoyl, *t*-butoxycarbonyl, benzyloxycarbonyl, pivaloyl, N-9-fluorenylmethoxycarbonyl, fumaroyl and derivatives thereof and Linker is a member selected from the group consisting of C6 to C16 lipidic chains and derivatives thereof, 8-amino-3,6-dioxaoctanoic acid and polymeric derivatives thereof, natural peptides, pseudopeptides of less than 4 residues, peptide mimics of less than 4 residues and combinations thereof.

23. (Withdrawn) The method for the treatment of a physiological condition according to claim 22 which comprises administering a pharmaceutical agent wherein x is 0 and Carrier — Peptide is a pro-drug.

24. (Withdrawn) The method for the treatment of a physiological condition according to claim 22 which comprises administering a pharmaceutical composition wherein x is 1 and Carrier — Linker — Peptide is a pro-drug.

25. (Currently Amended) A pharmaceutical agent having the formula:

Carrier — Linker — Peptide

wherein Peptide is a peptide having the formula aa_n where n is an integer ≤ 40;

wherein Carrier comprises an aryl or alkyl group of sufficient length or steric bulk to inhibit rapid enzymatic degradation of the active peptide species and is ~~comprises~~ a chemical moiety selected from the group consisting of a cinnamoyl, a benzoyl, a phenylacetyl, a 3-OH-cinnamoyl, a 3,4-OH-cinnamoyl, a 3,4-methylenedioxycinnamoyl, a 3-methoxycinnamoyl, a 3,4-dimethoxycinnamoyl, a 3,4,5-trimethoxy-cinnamoyl, a *t*-butoxy-carbonyl, a benzyloxycarbonyl, a pivaloyl, a N-9-fluorenylethoxycarbonyl, and a fumaroyl; and

wherein Linker comprises a chemical moiety selected from the group consisting of a C6 to C16 lipidic chains, a 8-amino-3,6-dioxaoctanoic acid and polymers thereof, a natural peptide, a pseudopeptide of less than 4 residues, a peptide mimic of less than 4 residues, and combinations thereof.